## MASSDEP DISCUSSION DRAFT REGULATION: CLEAN ENERGY STANDARD

This document is provided to support discussion of options for implementing a clean energy standard in Massachusetts. Draft regulatory language is provided to facilitate stakeholder discussion. To simplify review by stakeholders familiar with DOER's Renewable Portfolio Standard (RPS) regulations, similar or identical regulatory language is used for corresponding requirements. The table of contents includes citations to corresponding requirements in DOER regulations.

Key policy and technical issues that would require new or revised regulatory language are clearly identified within the document. Examples of such policy issues include which generation technologies would be included in the clean energy standard, whether existing facilities may be eligible to create credits, and whether municipal light plants would be regulated. An example of the type of technical issue addressed in this draft is whether a statement of qualification application process would be necessary for the CES. Note that all dates have been replaced by "[TBD]" and will be added at a later time if the relevant language is retained. The discussion draft also includes greenhouse gas reporting provisions that would replace those currently in effect at 310 CMR 7.71.

This discussion draft is being provided at this time for the sole purpose of soliciting stakeholder input prior to the development of regulations. If MassDEP proceeds with a CES regulation, additional analysis will be completed by MassDEP to develop regulatory language for consideration during a formal public comment process required by Massachusetts General Law Chapter 30A. For example, MassDEP may complete further revisions for consistency with standard MassDEP practice or statutory authority, or may eliminate provisions that are deemed irrelevant for the CES, such as provisions related to the statement of qualification process, as noted above.

- (1) Purpose.
- (2) <u>Definitions</u>. (225 CMR 14.02)
- (3) Applicability. (225 CMR 14.04)
- (4) Clean Energy Standard. (225 CMR 14.07)
- (5) Compliance Procedures for Retail Electricity Suppliers. (225 CMR 14.08)
- (6) <u>Annual Compliance Filings for Retail Electricity Suppliers</u>. (225 CMR 14.09)
- (7) Eligibility Criteria for Clean Energy Generation Units. (225 CMR 14.05)
- (8) Qualification Process for Clean Energy Generation Units. (225 CMR 14.06)
- (9) Reporting Requirements. (225 CMR 14.10)
- (10) Inspection. (225 CMR 14.11)

#### 310 CMR 7.75 CLEAN ENERGY STANDARD (DISCUSSION DRAFT)

(1) <u>Purpose</u>. The purposes of this regulation are to achieve emission reductions by setting a clean energy standard (CES) that will increase the amount of clean energy that is used by generation sources producing electricity consumed in Massachusetts, and to implement the requirement for

retail sellers of electricity to report statewide greenhouse gas emissions and to monitor and ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c.298, § 2(a)(5).

(2) <u>Definitions</u>. The definitions in 310 CMR 7.00 apply to 310 CMR 7.75. The following additional terms have the following meanings when they appear in 310 CMR 7.75. If a term is defined both in 310 CMR 7.00 and in 310 CMR 7.75(2), the definition in 310 CMR 7.75(2) applies for purposes of 310 CMR 7.75.

<u>Aggregation</u>. A group of one or more clean generation units that receives a single CES statement of qualification from the Department under criteria and procedures set forth in 310 CMR 7.75.

<u>CES Alternative Compliance Credit</u>. A credit obtained by a retail electricity supplier upon making a CES alternative compliance payment. Such credit is used to document compliance with 310 CMR 7.75(4). One unit of credit shall be equivalent to one clean generation attribute.

<u>CES Alternative Compliance Payment (CES ACP)</u>. A payment of a certain dollar amount per MWh, resulting in the issuance of CES alternative compliance credits, which a retail electricity supplier may submit to the Department in lieu of providing clean generation attributes required under 310 CMR 7.75(4).

<u>Authorized Agent</u>. A person or entity that serves as the agent or authorized person under an agreement entered into by each of the owners or operators of generation units within an aggregation for all dealings with the Department and with the NEPOOL GIS.

<u>Biogenic Greenhouse Gas Emissions</u>. Emissions of carbon dioxide that result from the combustion of biogenic (plant or animal) material, excluding fossil fuels.

<u>Business Day</u>. A business day shall mean Monday through Friday, exclusive of state and federal legal holidays.

<u>Carbon Dioxide Equivalent</u>. The amount of carbon dioxide by weight that would produce the same amount of global warming impact as a given weight of another greenhouse gas, calculated using the 100-year global warming potentials published by the Intergovernmental Panel on Climate Change in its Fifth Assessment Report (IPCC 2014).

<u>Certificates Obligation</u>. A term defined in the NEPOOL GIS operating rules at Rule 4.1(b), or any successor rule. [NOTE: DEP MAY NOT BE ABLE TO INCLUDE REFERENCES TO "SUCCESSOR" RULES IN THE FINAL REGULATION. THIS APPLIES TO OTHER SIMILAR REFERENCES ELSEWHERE IN THIS DOCUMENT.]

<u>CES Statement of Qualification</u>. A written document from the Department that qualifies a generation unit or aggregation as a clean generation unit, or that qualifies a portion of the annual electrical energy output of a generation unit or aggregation as clean generation.

<u>Clean Generation</u>. The electrical energy output excluding any electrical energy utilized for parasitic load of a clean generation unit, or that portion of the electrical energy output excluding any electrical energy utilized for parasitic load of a clean generation unit that qualifies under (1) the special provisions for incremental generating capacity, pursuant to 310 CMR 7.75(7)(b) issued on or after January 1, [TBD]; (2) a vintage waiver, pursuant to 310 CMR 7.75(7)(b) issued before January 1, [TBD]; (3) the special provisions for a generation unit located in a control area adjacent to the ISO-NE control area, pursuant to 310 CMR 7.75(7)(c); or (4) any other applicable provision of 310 CMR 7.75 or 225 CMR 14.00.

<u>Clean Generation Attribute</u>. The generation attribute of the electrical energy output of a specific clean generation unit that derives from the unit's production of clean generation.

<u>Clean Generation Unit</u>. A generation unit or aggregation that has received a CES statement of qualification from the Department, or that has received an RPS statement of qualification from DOER.

Commercial Operation Date. The date that a generation unit first produces electrical energy for sale within the ISO-NE control area or within an adjacent control area. In the case of a generation unit that has been moved from a location within the ISO-NE control area or within an adjacent control area to another location in one of those control areas, the date that such generation unit first produced electrical energy for sale at its earliest location in those control areas. In the case of a generation unit that is connected to the end-use customer's side of the electric meter, the date on which the local distribution company grants approval for the generation unit to interconnect with the grid. In the case of a generation unit that produces off-grid generation, the date that such generation unit first produces electrical energy.

Compliance Filing. A document filed annually by a retail electricity supplier in a format determined by the Department documenting compliance with 310 CMR 7.75(4), submitted no later than the first day of July, or the first business day thereafter, of the subsequent compliance year.

Compliance Year (CY). A calendar year beginning January 1 and ending December 31, for which a retail electricity supplier must demonstrate that it has met the requirements of 310 CMR 7.75(4) and (5).

<u>Control Area</u>. A geographic region in which a common generation control system is used to maintain scheduled interchange of electrical energy within and without the region.

<u>Emitting Electricity Generators</u>. Electricity generators that are powered by any fossil or biogenic fuels.

<u>Emitting Megawatt Hours</u>. Megawatt hours that are generated by emitting electricity generators.

<u>End-use Customer</u>. A person or entity in Massachusetts that purchases electrical energy at retail from a retail electricity supplier, except that a generation unit taking station service at wholesale from ISO-NE or self-supplying from its owner's other generating stations, shall not be considered an end-use customer.

<u>Generation Attribute</u>. A non-price characteristic of the electrical energy output of a generation unit including, but not limited to, the unit's fuel type, emissions, vintage and eligibility for renewable or clean energy programs.

<u>GIS Certificate</u>. An electronic record produced by the NEPOOL GIS that identifies generation attributes of each MWh accounted for in the NEPOOL GIS.

<u>Greenhouse Gas</u>. For purposes of 310 CMR 7.75, greenhouse gases are carbon dioxide, methane, and nitrous oxide.

<u>Historical Generation Rate</u>. The average annual electrical production from a vintage generation unit, stated in MWh, for the three calendar years [TBD], or for the first 36 months after the commercial operation date if that date is after January 1, [TBD].

<u>Intermittent Generation Unit.</u> A generation unit that utilizes hydroelectric energy, or other resources regarding which the timing or magnitude is not predictable or controllable, as determined by the Department.

<u>ISO-NE</u>. ISO New England Inc., the independent system operator for New England, the regional transmission organization for most of New England, which is authorized by the Federal Energy Regulatory Commission (FERC) to exercise for the New England Control Area the functions required pursuant to the FERC's Order No. 2000, the FERC's corresponding regulations, and any successor FERC orders and regulations.

<u>ISO-NE Settlement Market System</u>. The ISO-NE's electronic database system into which all real-time load and generation data are entered and from which such data are provided to the NEPOOL GIS.

<u>Massachusetts Department of Energy Resources or DOER</u>. The Massachusetts agency established pursuant to M.G.L. c. 25A, §§ 1 through 13.

<u>Megawatt-hour (MWh)</u>. A unit of electrical energy or work equivalent to one million watts of power operating for one hour.

<u>NEPOOL GIS</u>. The NEPOOL Generation Information System, which includes a generation information database and certificate system, operated by the New England Power Pool (NEPOOL), its designee or successor entity, that accounts for generation attributes of electrical energy consumed and generated within, imported into, or exported from the ISO-NE control area.

<u>NERC Tag.</u> A document that identifies an electrical energy interchange transaction and its associated participants, assigned in accordance with rules set forth by the North American Electric Reliability Corporation (NERC), a non-profit corporation granted by the FERC the legal authority to enforce mandatory reliability standards for the U.S. bulk power system, subject to FERC oversight.

<u>Non emitting Electricity Generators</u>. Electricity generators powered by hydro, nuclear, ocean, solar or wind power.

<u>Non emitting Megawatt Hours</u>. Megawatt hours that are generated by non emitting electricity generators.

<u>Off-grid Generation</u>. The electrical energy produced by a generation unit that is not connected to a utility transmission or distribution system.

<u>Operator</u>. Any person or entity that has charge or control of a generation unit subject to 310 CMR 7.75(7) - (9), including without limitation a duly authorized agent or lessee of the owner, or a duly authorized independent contractor.

Owner. Any person or entity that, alone or in conjunction with others, has legal ownership, a leasehold interest, or effective control over the real property or property interest upon which a generation unit is located, or the airspace above said real property, including without limitation a duly authorized agent of the owner. For the purposes of 310 CMR 7.75, owner does not mean a person or entity holding legal title or security interest solely for the purpose of providing financing.

<u>Power Conversion Technology.</u> The design, process, and equipment by which an energy resource is converted into useful energy.

<u>Retail Electricity Product</u>. An electrical energy offering that is distinguished by its generation attributes and that is offered for sale by a retail electricity supplier to enduse customers.

<u>Retail Electricity Seller or Retail Seller</u>. A competitive supplier licensed by the Department of Public Utilities or, as each is defined in M.G.L. c. 164A, § 1, an electric utility, municipal electric department or municipal light board.

RPS Alternative Compliance Credit. A credit obtained by a retail electricity supplier upon making a payment pursuant to 225 CMR 14.08(3), and used to

comply with 225 CMR 14.07.

<u>RPS Class I Renewable Generation Unit</u>. A generation unit or aggregation that has received a statement of qualification as an RPS Class I renewable generation unit from DOER pursuant to 225 CMR 14.00.

<u>RPS Statement of Qualification</u>. A written document issued by DOER pursuant to 225 CMR 14.06.

Short Ton. 2000 pounds or 0.9072 metric tons.

<u>Vintage Generation Unit</u>. A generation unit that meets the requirements of 310 CMR 7.75(7)(a), that has a commercial operation date of December 31, [TBD], or earlier, and for which the Department issued a CES statement of qualification under the vintage waiver provision in 310 CMR 7.75(7)(b) before January 1, [TBD].

- (3) <u>Applicability</u>. Retail electricity sellers are required to comply with 310 CMR 7.75. [NOTE: THE OPTION INCLUDED IN THIS DISCUSSION DRAFT WOULD INCLUDE MUNICIPAL LIGHT PLANTS, UNLIKE RPS.]
- (4) <u>Clean Energy Standard</u>. The total annual sales of each retail electricity product sold to Massachusetts end-use customers by a retail electricity sellers shall include a minimum percentage of electrical energy sales with clean generation attributes. [NOTE: THIS DISCUSSION DRAFT DOES NOT INLCUDE A PROPOSED STANDARD. IF MASSDEP ADOPTS A CES, MASSDEP INTENDS TO SET A STANDARD CONSISTENT WITH THE GOAL OF REDUCING ELECTRIC SECTOR EMISSIONS BY 80 95% BY 2050, RELATIVE TO A 1990 BASELINE. MASSDEP MAY CONSIDER THE USE OF MULTI-YEAR COMPLIANCE PERIODS INSTEAD OF REQUIRING ANNUAL COMPLIANCE.]

#### (5) Compliance Procedures for Retail Electricity Sellers

- (a) <u>Standard Compliance</u>. Each retail electricity seller shall be deemed to be in compliance with 310 CMR 7.75 if the information provided in the compliance filing submitted pursuant to 310 CMR 7.75(5) is true and accurate and demonstrates compliance with 310 CMR 7.75(4). A retail electricity seller shall demonstrate to the satisfaction of the Department that clean generation attributes used for compliance have not otherwise been, nor will be, sold, retired, claimed, used or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.
- (b) <u>Banked Compliance</u>. [NOTE: MASSDEP COULD APPLY DIFFERENT BANKING PROVISIONS TO THE CES. THE PROVISIONS INCLUDED IN THIS DRAFT ARE IDENTICAL TO THOSE INCLUDED IN RPS.] A retail electricity seller may use clean generation attributes produced in one compliance year for compliance in either or both of the two subsequent compliance years, subject to the limitations in 310 CMR 7.75(5)(b) and provided that the retail electricity seller is in compliance with 310 CMR 7.75 for all previous compliance years. In addition, the retail electricity seller shall demonstrate to the satisfaction of

the Department that such attributes:

- 1. were in excess of the clean generation attributes needed for compliance in the compliance year in which they were generated, and that such excess attributes have not previously been used for compliance with 310 CMR 7.75;
- 2. do not exceed 30% of the clean energy generation attributes needed by the retail electricity seller for compliance with 310 CMR 7.75(4) in the year they were generated, subject to 310 CMR 7.75(5)(b)4.;
- 3. were produced during the compliance year in which they are claimed as excess by the generation of electrical energy sold to end-use customers in the ISO-NE control area, by the generation of electrical energy on end-use customers' sides of retail meters in the ISO-NE control area, or by the generation of electrical energy from off-grid generation units in Massachusetts; and
- 4. have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.
- (c) <u>Alternative Compliance</u>. A retail electricity seller may discharge its obligations under 310 CMR 7.75(6), in whole or in part, for any compliance year by making a CES ACP. Additionally, any RPS alternative compliance credits claimed pursuant to 225 CMR 14.08(3)(a) and used to comply with 225 CMR 14.07 shall be counted toward compliance with 310 CMR 7.75. [NOTE: IF THE CES INCLUDES AN ACP PROVISION, IT WILL BE NECESSARY TO SPECIFY THE DISPOSITION OF ANY FUNDS RECEIVED, CONSISTANT WITH RELEVANT STATUES. FOR EXAMPLE, THE RPS REGULATION SPECIFIES THAT ACP PAYMENTS BE MADE TO MASSCEC.]
  - 1. <u>Procedures</u>. A retail electricity seller shall receive CES alternative compliance credits from the Department, subject to the following:
    - a. The quantity of credits, specified in MWh, that can be applied to its obligations under 310 CMR 7.75(4) shall be determined by calculating the ratio of the total of CES ACPs paid for the compliance year to the CES ACP Rate for that compliance year.
    - b. The CES ACP Rate shall be [INSERT RATE HERE]
    - c. The retail electricity seller shall include with its annual compliance filing copies of any CES ACP receipt(s) for CES ACPs made to the [INSERT RECIPIENT HERE] for the compliance year.
  - 2. <u>Use of Funds</u>. [NOTE: IF THE CES INCLUDES AN ACP, MASSDEP'S ROLE IN ADMISTERING THE FUNDS MAY BE SPECIFIED HERE.]

### (6) Annual Compliance Filings for Retail Electricity Sellers

- (a) <u>Date of Annual Compliance Filing</u>. For each compliance year, the retail electricity seller annually shall file an annual compliance filing with the Department no later than the first day of July, or the first business day thereafter, of the subsequent compliance year.
- (b) <u>Contents of Annual Compliance Filing</u>. For each retail electricity product, the filing shall document compliance with the provisions of 310 CMR 7.75(4) and (5) to the satisfaction of the Department and shall include, but not be limited to, the following:
  - 1. Total Electrical Energy Sales to End-use Customers. Documentation of the

- total MWh of electrical energy allocated by the retail electricity seller to end-use customers in the compliance year. Such allocation is defined as the total quantity of the seller's certificates obligation that the seller correctly allocated or should have allocated to all of the seller's Massachusetts retail subaccounts in the NEPOOL GIS, in compliance with all relevant provisions of Part 4 of the NEPOOL GIS Operating Rules, or any successor rules, as specified in the Guideline on the Determination of Sales to End-Use Customers.
- 2. Electrical Energy Sales to End-use Customers by Product. Documentation of the total MWh of each retail electricity product allocated to end-use customers in the compliance year, verified by an independent third party satisfactory to the Department. Such allocation is defined as the quantity of the seller's certificates obligation that the seller correctly allocated or should have allocated to each of the seller's Massachusetts retail subaccounts at the NEPOOL GIS, in compliance with all relevant provisions of Part 4 of the NEPOOL GIS Operating Rules, or any successor rules, as specified in the Guideline on the Determination of Sales to End-Use Customers.
- 3. Attributes Allocated from the Compliance Year. Documentation of the total MWh of each retail electricity product allocated to end-use customers that were derived from clean generation during the compliance year, and which may include electrical energy generated on end-use customers' sides of retail meters in the ISO-NE control area or by off-grid generation units in Massachusetts [NOTE: REFERENCES TO BEHIND-THE-METER AND OFF-GRID GENERATION MAY NOT BE NECESSARY FOR THE CES BECAUSE OF THE SIZE AND TYPE OF GENERATION UNITS LIKELY TO BE ELIGIBLE.] in the compliance year, as follows:
  - a. For electrical energy transactions included in the ISO-NE Settlement Market System, the compliance filings shall include documentation from the NEPOOL GIS administrator of the retail electricity seller's ownership of GIS certificates representing clean generation during the compliance year. b. For electrical energy transactions not included in the ISO-NE Settlement Market System, but for which the retail electricity seller has secured GIS certificates from the NEPOOL GIS, the compliance filings shall include documentation from the NEPOOL GIS of the retail electricity seller's ownership of GIS Certificates representing clean generation during the compliance year.
- 4. <u>Attributes Allocated from Banked Compliance</u>. Allocation by retail electricity product of any quantity of clean generation attributes banked from one or both of the two previous years pursuant to 310 CMR 7.75(5)(b) that are used to demonstrate compliance with the clean energy standard in the current compliance year;
- 5. CES <u>Alternative Compliance Credits</u>. Allocation by retail electricity product of any CES alternative compliance credits claimed pursuant to 310 CMR 7.75(5)(c)1. or RPS alternative compliance credits claimed pursuant to 225 CMR 14.08(3)(a), along with a copy of any alternative compliance payment receipt(s), and
- 6. <u>Attributes Banked for Future Compliance</u>. Identification of any quantity of attributes from clean generation, that the retail electricity seller anticipates

claiming for purposes of banked compliance in subsequent years under the banked compliance provisions of 310 CMR 7.75(5)(b).

#### (7) Eligibility Criteria for Clean Generation Units.

- (a) <u>Eligibility Criteria</u>. A generation unit may qualify as a clean generation unit subject to the limitations in 310 CMR 7.75(7).
  - 1. <u>Fuels, Energy Resources and Technologies</u>. The generation unit shall satisfy at least one of the following two eligibility criteria:
    - a. The generation unit has been issued an RPS statement of qualification as an RPS Class I renewable generation unit pursuant to 225 CMR 14.06(3) or, [NOTE: MASSDEP IS CONSIDERING WHETHER TO INCLUDE REFERENCES TO OTHER CATEGORIES OF RPS/APS –ELIGIBLE TECHNOLOGIES. IF MASSDEP CHOOSES TO INCLUDE EXISTING GENERATION IN THE CES, THEN IT WILL BE NECESSARY TO REFERENCE RPS CLASS II.]
    - b. Any other fuel, energy resource, or technology that yields at least a 50% reduction of greenhouse gas emissions per unit of useful energy relative to a new combined cycle natural gas electric generating facility using the most efficient commercially available technology as of the date of the CES statement of qualification application for the portion of electricity delivered by the generation unit. [NOTE: THE OPTION INCLUDED IN THIS DISCUSSION DRAFT IS SIMILAR TO THE CURRENT RPS STANDARD FOR BIOMASS. THIS CRITERION WOULD ALLOW NUCLEAR AND HYDROELECTRIC UNITS TO QUALIFY, AND WOULD ALSO PROVIDE A STANDARD FOR EVALUATING PLANTS THAT UTILIZE CARBON CAPTURE AND STORAGE. INSTEAD OF AN EMISSIONS-BASED CRITERION, MASSDEP COULD INCLUDE A SPECIFIC LIST OF TECHNOLOGIES. IF THE CES INCLUDES EXISTING TECHNOLOGIES, THEN IT MAY BE DESIREABLE TO ADD A SEPARATE CLASS, SIMILAR TO RPS. MASSDEP COULD ALSO CONSIDER OPTIONS FOR WEIGHTING CREDITS FOR DIFFERENT TECHNOLGIES, FOR EXAMPLE TO TARGET PRIORITY TECHNOLGIES SUCH AS OFFSHORE WIND.]
  - 2. Commercial Operation Date. For a generation unit that qualifies as a clean generation unit pursuant to 310 CMR 7.75(7)(a)1.b., the commercial operation date shall be after December 31, [TBD], unless the generation unit receives a CES statement of qualification with a vintage waiver pursuant to 310 CMR 7.75(7)(b). [NOTE: THE OPTION INCLUDED IN THIS DISCUSSION DRAFT WOULD LIMIT ELIGIBILITY TO "NEW" FACILITIES CONSTRUCTED AFTER A SPECIFIC DATE. THIS PROVISION WILL NOT BE NECESSARY IF THE CES DOES NOT LIMIT ELIGIBILITY TO "NEW" FACILITIES. IF THE CES IS LIMITED TO NEW FACILITIES, THEN IT WILL BE NECESSARY TO DETERMINE THE APPROPRIATE START DATE. IN EITHER CASE, ADDITIONAL REVISIONS WILL BE NECESSARY TO OTHER PARTS OF THE REGULATIONS TO REVISE OR ELIMINATE START-DATE REFERENCES.]

- 3. <u>Metering</u>. The electrical energy output from the generation unit shall be verified by the ISO-NE or by an independent verification system or person participating in the NEPOOL GIS accounting system as an independent Third Party Meter Reader, as defined in Rule 2.5(j) of the NEPOOL GIS Operating Rules, or any successor rule, and approved by the Department. [NOTE: DEPENDING ON WHETHER THIRD PARTY INVOLVEMENT IS NECESSARY FOR ELIGIBLE TECHNOLOGIES, DEPARTMENT APPROVAL MAY NOT BE NECESSARY.]
- 4. <u>Location</u>. The generation unit location is subject to the limitations in 310 CMR 7.75(7)(a)4. [NOTE: THIS PROVISION MAY NOT BE RELEVANT FOR THE CES BECAUSE OF THE SIZE AND TYPE OF THE GENERATION UNITS LIKELY TO BE ELIGIBLE.]
  - a. <u>Off-grid Generation</u>. If the generation unit produces off-grid generation, such unit must be located in Massachusetts.
  - b. <u>Behind-the-meter Generation</u>. If the generation unit is wired to the electrical system on the end-use customer's side of a retail electric meter, such unit must be located within the ISO-NE control area.
- 5. <u>Capacity Obligation</u>. The generation unit's generating capacity is subject to the obligations in 310 CMR 7.75(7)(a)5.
  - a. The amount of the generation capacity of the generation unit whose electrical energy output is claimed as clean generation shall not be committed to any control area other than the ISO-NE control area unless such generation unit has entered into a capacity obligation in another control area before the start of the first available compliance year for the ISO-NE forward capacity market, in which case this subsection shall apply upon the expiration of that capacity obligation. However, if the generation unit executed a contract for the sale of clean generation attributes or clean generation, or both, before January 1, [TBD], for a term of at least two years, the contract price of which relied on the receipt of capacity payments from a control area adjacent to the ISO-NE Control Area, and the generation unit can demonstrate such reliance to the satisfaction of the Department, this requirement shall not take effect for that generation unit until the expiration of that contract.
  - b. The generation unit owner or operator of a generation unit that is not an intermittent generation unit shall commit to the ISO-NE Control Area the amount of the capacity of that unit claimed as clean generation by submitting by the applicable deadline a show of intent for the ISO-NE forward capacity auction that is the earliest available for the unit after the owner or operator has submitted a CES statement of qualification application unless the owner or operator can provide to the Department documentation of its prior commitment to the ISO-NE control area of such capacity. [NOTE: THE REFERENCE TO INTERMITTENT GENERATION UNITS MAY NOT BE NECESSARY BECAUSE OF THE SIZE AND TYPE OF GENERATION UNITS LIKELY TO BE ELIGIBLE.] The owner or operator of any unit that cannot demonstrate such prior commitment must also clear the forward capacity auction for which it has qualified, even if it

must participate as a price taker.

- c. A clean generation unit that was deemed unqualified by the ISO-NE for participation in the ISO-NE forward capacity market for technical reasons may commit capacity to another control area and may receive GIS certificates for the energy sold into the ISO-NE control area, subject to a determination by the Department.
- d. A clean generation unit that has registered with the relevant distribution company as a net metering facility pursuant to 220 CMR 18.00, shall be exempt from the capacity obligation under 310 CMR 7.75(7)(a)5. while the facility is net metering. [NOTE: THIS NET METERING PROVISION MAY NOT BE RELEVANT FOR THE CES BECAUSE OF THE SIZE OF THE GENERATION UNITS LIKELY TO BE ELIGIBLE]
- (b) Special Provisions for Incremental Generation. An increase in electrical energy output of a generation unit with a commercial operation date on or before December 31, [TBD], may qualify as clean generation, subject to the limitations in 310 CMR 7.75(7)(b). [NOTE: IF THE CES INCLUDES EXISTING GENERATION, THIS PROVISION WILL NOT BE NECESSARY. IF THE CES IS LIMITED TO NEW GENERATION, THE QUALIFICATION DATE WILL REQUIRE ADJUSTMENT. ALSO NOTE THAT IF THE CES INCLUDES EXISTING GENERATION, ADDITIONAL LANGUAGE WILL BE NECESSARY TO ADDRESS EXISTING RENEWABLE RESOURCES THAT ARE CURRENTLY ADDRESSED UNDER RPS CLASS II.]
  - 1. The generation unit must meet the eligibility requirements of 310 CMR 7.75 with the exception of 310 CMR 7.75(7)(a)2.
  - 2. The portion of the total electrical energy output of the generation unit that qualifies as clean generation in a given calendar year shall be the portion attributable to incremental new generating capacity or efficiency improvements installed or implemented after December 31, [TBD], using equipment that was not utilized in any clean generation unit within the ISO-NE control area or within control areas adjacent thereto on or before December 31, [TBD].
- (c) <u>Special Provisions for a Generation Unit Located in a Control Area Adjacent to the ISO-NE Control Area</u>. The portion of the total electrical energy output of a clean generation unit located in a control area adjacent to the ISO-NE control area that qualifies as clean generation shall meet the requirements in Rule 2.7(c) and all other relevant sections of the NEPOOL GIS Operating Rules or any successor rule, and the requirements in 310 CMR 7.75(7)(c).
  - 1. The generation unit owner or operator shall provide documentation, satisfactory to the Department, of a contract or other legally enforceable obligation that is executed between the generation unit owner or operator and an electrical energy purchaser located in the ISO-NE control area for delivery of the unit's electrical energy to the ISO-NE control area. Such documentation shall include provisions for obtaining associated transmission rights for delivery of the unit's electrical energy from the unit to the ISO-NE Control Area. The generation unit owner or operator shall pay for evaluation and verification of the provisions of such documentation by an independent party that is engaged or approved by the Department. [NOTE: MASSDEP IS CONSIDERING

# WHETHER THE DOCUMENTATION REQUIREMENT BELOW MAY BE ADEQUATE FOR THE CES WITHOUT THIS CONTRACT SUBMITTAL REQUIREMENT.]

- 2. The generation unit owner or operator shall provide documentation, satisfactory to the Department, that:
  - a. the electrical energy delivered pursuant to the legal obligation was settled in the ISO-NE Settlement Market System;
  - b. the generation unit produced, during each hour of the applicable month, the amount of MWh claimed, as verified by the NEPOOL GIS administrator; if the originating control area employs a generation information system that is comparable to the NEPOOL GIS, information from that system may be used to support such documentation;
  - c. the electrical energy delivered under the legal obligation received a NERC tag confirming transmission from the adjacent control area to the ISO-NE control area; and
  - d. the clean generation attributes have not otherwise been, nor will be, sold, retired, claimed, used or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.
- 3. The generation unit owner or operator must provide an attestation in a form approved by the Department that it will not itself or through any affiliate or other contracted party, knowingly engage in the process of importing clean generation into the ISO-NE control area for the creation of clean GIS certificates, and then exporting that energy or a similar quantity of other energy out of the ISO-NE control area during the same hour.
- 4. The quantity of electrical energy output from a clean generation unit outside the ISO-NE control area that can qualify as clean generation at the NEPOOL GIS during each hour is limited to the lesser of the clean generation actually produced by the unit or the clean generation actually scheduled and delivered into the ISO-NE Control Area.
- (d) <u>Special Provisions for Aggregations</u>. An aggregation of generation units that are located behind the customer meter or that are off-grid generation units, each of which could independently meet the relevant requirements of 310 CMR 7.75(7)(b), may receive a single CES statement of qualification and be treated as a single clean generation unit under the criteria and procedures in 310 CMR 7.75(7)(d). [NOTE: THIS PROVISION MAY NOT BE RELEVANT FOR THE CES BECAUSE OF THE SIZE OF THE GENERATION UNITS LIKELY TO BE ELIGIBLE.]
  - 1. Each generation unit in such aggregation must be located within the same state and use the same fuel, energy resource and technology as all other units in the aggregation.
  - 2. Each of the owners or operators of generation units within the aggregation must enter into an agreement with a person or entity that serves as the authorized agent for the aggregation in all dealings with the Department and with the NEPOOL GIS, and such agreement must include procedures by which the electrical energy output of each generation unit shall be monitored and reported to the NEPOOL GIS.
  - 3. The authorized agent of the aggregation must establish and maintain a

generator account at the NEPOOL GIS under the NEPOOL GIS Operating Rules, including all provisions for non-NEPOOL generator representatives, as that term is defined in Rule 2.1(a)(vi) of those rules, or any successor rules.

- 4. The electrical energy output of each of the generation units in the aggregation must be individually monitored and recorded, and it must be reported to the NEPOOL GIS, by an independent third party meter reader as defined in rule 2.5(j) of the NEPOOL GIS Operating Rules, or any successor rule, and approved by the Department.
- (e) <u>Special Provisions for Relocated, Repowered, and Replacement Generation Units</u>. The Department may provide a CES statement of qualification to a generation unit that meets one of the following categories and criteria, as well as all other relevant provisions of 310 CMR 7.75(7): [NOTE: THESE PROVISIONS MAY NOT BE NECESSARY FOR THE CES.]
  - 1. Relocated Clean Energy Generation Unit. A generation unit whose power conversion technology was used on or before December 31, [TBD], to generate electrical energy outside of both the ISO-NE control area and control areas adjacent thereto, and that is relocated into one of said control areas after December 31, [TBD] provided that any components of the power conversion technology that were not used outside of said control areas were first used in a generation unit after December 31, [TBD].
  - 2. <u>Repowered Clean Generation Unit</u>. A generation unit that did not utilize a fuel, energy resource, or technology listed at 310 CMR 7.75(7)(a)1.b. at any time on or before December 31, [TBD].
  - 3. <u>Replacement Clean Energy Generation Unit</u>. A generation unit that replaces a mothballed or decommissioned generation unit that had operated on the same site on or before December 31, [TBD], subject to the following limitations:
    - a. The entire power conversion technology of the existing unit is replaced with equipment manufactured after December 31, [TBD]; and
    - b. The existing unit has not been in commercial operation for at least five years prior to submission of the CES statement of qualification application.
- (8) Qualification Process for Clean Energy Generation Units. [NOTE: THE OPTION INCLUDED IN THIS DISCUSSION DRAFT WOULD ESTABLISH A STATEMENT OF QUALIFICATION PROCESS SIMILAR TO THE ONE USED BY THE RPS PROGRAM. HOWEVER, THE STATEMENT OF QUALIFICATION PROCESS MAY NOT BE NECESSARY FOR THE CES IF NO REVIEW OF EMISSIONS OR START-UP DATE IS NECESSARY. IT MAY BE POSSIBLE TO IDENTIFY CANADIAN HYDROELECTRIC RESOURCES WITHOUT A QUALIFICATION PROCESS.]
  - (a) <u>CES Statement of Qualification Application</u>. A CES statement of qualification application shall be submitted to the department by the owner or operator of the generation unit, or by the authorized agent for an aggregation, as provided in 310 CMR 7.75(7)(d)2. The applicant must use the most current forms and associated instructions provided by the Department, and must include all information, documentation, and assurances required by such forms and instructions.
  - (b) Review Procedures.
    - 1. The Department will notify the applicant when the CES statement of

- qualification application is administratively complete or if additional information is required pursuant to 310 CMR 7.75(8)(a).
- 2. The Department may, in its sole discretion, provide an opportunity for public comment on any CES statement of qualification application.
- (c) <u>Issuance or Non-Issuance of a CES Statement of Qualification</u>.
  - 1. If the Department finds that all or a portion of the electrical energy output of a generation unit or of an aggregation meets the requirements for eligibility as clean generation pursuant to 310 CMR 7.75(7)(a), and the generation unit is not eligible to receive an RPS statement of qualification from DOER, the Department will provide the owner or operator of such unit or the authorized agent for such aggregation with a CES statement of qualification.
  - 2. The CES statement of qualification shall include any applicable restrictions and conditions that the Department deems necessary to ensure compliance by a particular generation unit or aggregation with the provisions of 310 CMR 7.75.
  - 3. If the generation unit or aggregation does not meet the requirements for eligibility as a clean generation unit, the Department shall provide written notice to the Owner or Operator or to the authorized agent for an aggregation, including the Department's reasons for such finding.
- (d) <u>Notification Requirements for Change in Eligibility Status</u>. The owner or operator of a clean generation unit shall notify the Department of any changes in the technology, operation, emissions, fuel sources, energy resources, capacity commitment, or other characteristics of the generation unit that may affect the eligibility of the unit as a clean generation unit. The owner or operator shall submit the notification to the Department no later than five days following the end of the month during which such changes were implemented. The notice shall state the date the changes were made to the clean generation unit and describe the changes in sufficient detail to enable the Department to determine if a change in eligibility is warranted.
- (e) <u>Notification Requirements for Change in Ownership, Generation Capacity, or Contact Information</u>. The owner or operator of a clean generation unit shall notify the Department of any changes in the ownership, operating entity, generation capacity, NEPOOL GIS account, independent verification system for the unit's or aggregation's electrical energy output, or contact information for the generation unit or aggregation. The owner or operator shall submit the notification to the Department no later than five days following the end of the month during which such changes were implemented.
- (f) <u>Time Limit for Project Implementation</u>. Any CES statement of qualification shall expire 48 months after the issuance date of the CES statement of qualification (the expiration date) unless the commercial operation date of the generation unit or aggregation is on or before the expiration date. The Department may, at its discretion, grant an extension of the expiration date of the CES statement of qualification upon petition by the owner or operator of the generation unit or aggregation. If the owner or operator of such unit or aggregation desires an extension, such owner or operator must submit a new CES statement of qualification application, and the decision of the Department on such new

- application may be made in accordance with the regulations and criteria that are applicable on the date that the Department receives that application.
- (g) <u>Suspension or Revocation of CES Statement of Qualification</u>. The Department may suspend or revoke a CES statement of qualification if the owner or operator of a clean generation unit or authorized agent of an aggregation fails to comply with 310 CMR 7.75.
- (h) <u>Identification of Clean Generation Units</u>. The Department shall inform the NEPOOL GIS administrator which generation units should be designated clean generation units pursuant to 310 CMR 7.75.

## (9) Reporting Requirements

- (a) <u>Certification</u>. Any person required by 310 CMR 7.75 to submit documentation to the Department shall provide:
  - 1. the person's name, title and business address;
  - 2. the person's authority to certify and submit the documentation to the Department; and
  - 3. the following certification: "I hereby certify, under the pains and penalties of perjury, that I have personally examined and am familiar with the information submitted herein and based upon my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties, both civil and criminal, for submitting false information, including possible fines and imprisonment." [NOTE: THIS STATEMENT IS IDENTICAL TO THE ONE IN THE RPS REGULATION, AND VERY SIMILAR TO MASSDEP'S STANDARD LANGUAGE. HAVING IDENTICAL CERTIFICATION LANGUAGE TO THE RPS REGULATION COULD SIMPLIFY THE SUBMITTAL PROCESS.]
- (b) <u>Annual Renewable Energy Resource Report</u>. The Department shall produce and make available to the public an annual report that summarizes information submitted to the Department by retail electric sellers in the annual compliance filings submitted to the Department pursuant to 310 CMR 7.75(6)(b). Such report shall include non-confidential data that provides the following:
  - 1. the extent to which the retail electric sellers complied with the minimum clean energy standard, both separately and combined;
  - 2. the extent to which the retail electric sellers used standard compliance, banked compliance, and alternative compliance in meeting the minimum standards; and
  - 3. the names, locations, and types of clean generation from which the retail electric sellers, as an aggregate, obtained the renewable energy attributes used in meeting the minimum standards.
- (c) Greenhouse Gas Emissions Reporting [NOTE: THE OPTION INCLUDED IN THIS DISCUSSION DRAFT WOULD REVISE MASSDEP'S GHG REPORTING REQUIREMENTS FOR CONSISTENCY WITH CES. THESE PROVISIONS ARE ADAPTED FROM THOSE CURRENTLY IN EFFECT AS 310 CMR 7.71(9), AND MAY REQUIRE REVISION FOR COMPATIBILITY WITH FINAL PROGRAM DESIGN.]
  - 1. Each retail seller of electricity shall annually report to the Department its

megawatt hours sold and associated greenhouse gas emissions. The first required reporting year for retail sellers which are competitive sellers is the first year after 2007 in which they sell electricity in Massachusetts. Biogenic and non biogenic greenhouse gas emissions shall be reported separately. This report shall be on a form provided by the Department and shall include a spreadsheet showing the calculations required under 310 CMR 7.75(9)(c)3.

#### 2. Deadlines.

- a. Beginning with [TBD] calendar year emissions, the annual GHG emissions report shall be submitted no later than the fifteenth day of the second September following each calendar year. The report shall be submitted using the final annual emission factors provided by the Department for the purpose of calculating greenhouse gas emissions pursuant to 310 CMR 7.75(9)(c)3.
- b. In order to finalize the annual biogenic and non biogenic emission factors, the Department shall:
  - i. post draft annual emission factors, including methodologies and data sources, on its website for public comment for 30 days and notify retail sellers of the posting and of the deadline for submittal of public comment; and,
  - ii. post final annual emission factors, including methodologies and data sources, on its website and notify retail sellers of the posting.
- 3. All retail sellers shall use the following formula to calculate greenhouse gas emissions:
- GHG = (EF \* MWh / 2000 pounds per short ton) + emissions reported in 310CMR 7.75(9)(c)4.c.

Where:

GHG = Short tons of greenhouse gases (in carbon dioxide equivalents) associated with electricity sold in MA in a particular calendar year.

EF = Emission factors supplied by the Department each year for biogenic and non biogenic greenhouse gas emissions (pounds carbon dioxide equivalents per megawatt hour).

MWh = Annual electricity consumed by customers in a particular calendar year, increased to account for the portion of electricity lost during transmission and distribution (line losses), as reported pursuant to 310 CMR 7.75(6)(b)1.

- 4. Source of Megawatt Hour and Emissions Data.
  - a. In calculating biogenic and non biogenic greenhouse gas emissions, retail sellers shall report the same number of megawatt hours used to calculate any CES certificates obligation under 310 CMR 7.75, inclusive of line losses.
  - b. Retail sellers shall report, by fuel, the number of emitting and non-emitting megawatt hours of electricity generated by emitting and non emitting electricity generators represented by GIS certificates retired in a retail seller's New England Power Pool Generation Information System Massachusetts Retail Subaccount, as defined in the New England Power Pool Generation Information System Operating Rules. The sum of these megawatt hours shall be subtracted from the megawatt hours reported in 310 CMR 7.75(9)(c)4.a.

- c. Carbon dioxide, methane and nitrous oxide emissions from any emitting electricity generator shall be reported as follows:
  - i. if the emissions from emitting electricity generators reported in 310 CMR 7.75(9)(c)4.b. are reported under 310 CMR 7.71(5) or (8), then the retail seller shall so state in the report submitted under 310 CMR 7.75(9)(c)2.a.
  - ii. if only a portion of the emissions reported by a particular stationary emission source under 310 CMR 7.71(5) or (8) are associated with the emitting megawatt hours of electricity reported in 310 CMR 7.75(9)(c)4.b., then the retail seller shall document an apportionment of the emissions, and shall submit such documentation to the Department no later than the first day of July after the calendar year in which the emitting megawatt hours were generated.
  - iii. if the emissions from emitting electricity generators reported in 310 CMR 7.75(9)(c)4.b.. are not reported under 310 CMR 7.71(5) or (8), such emissions, and documentation showing that the emissions were determined in a manner consistent with the requirements of 310 CMR 7.71(5), and showing any apportionment of emissions, shall be submitted to the Department no later than the first day of July after the calendar year in which the emitting megawatt hours were generated.
- 5. Retail sellers subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.75(9) shall certify greenhouse gas emissions reports using a form provided by the Department. The form shall include, but not be limited to, the following:
  - a. Any information deemed necessary by the Department to positively identify the retail seller.
  - b. The following certification statement: "I certify that I have personally examined the greenhouse gas emissions report I am submitting and am familiar with the information contained in that report and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."
  - c. The authorized signature and contact information of a responsible official of the retail seller subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.75(9).
- (10) <u>Inspection</u> [NOTE: MASSDEP MAY RETAIN SIMILAR PROVISIONS, WHICH PARALLEL PROVISIONS IN DOER RPS REGULATIONS, TO PROVIDE CONSISTENCY BETWEEN RPS AND CES. HOWEVER, DEP WILL ALSO INCLUDE ADDITIONAL RECORD RETENTION REQUIREMENTS, WILL ALSO INCLUDE A CITATION TO RELVENT ENFORECMENT AUTHORITY.]
  - (a) <u>Document Inspection</u>. The Department may audit the accuracy of all information submitted pursuant to 310 CMR 7.75. The Department may request and obtain from any owner, operator or authorized agent of a clean generation unit, including aggregations, and from any retail electricity supplier information that the

Department determines necessary to monitor compliance with and enforcement of 310 CMR 7.75.

(b) <u>Audit and Site Inspection</u>. Upon reasonable notice to a retail electricity supplier or to a clean generation unit owner, operator or authorized agent, the Department may conduct audits, which may include inspection and copying of records and/or site visits to a clean energy generation unit, or a retail electricity supplier's facilities, including, but not limited to, all files and documents that the Department determines are related to compliance with 310 CMR 7.75.